

2011 Military Health System

Conference

**Big Things on the Horizon for
Electronic Health Records and
Communication with our Partners**

The Quadruple Aim: Working Together, Achieving Success

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January 26 2011



Agenda



- James A Lovell Federal Health Care Center (JAL FHCC)
- Virtual Lifetime Electronic Record (VLER)
- Electronic Health Records (EHR) Way Forward
- National Health Focus

JAL FHCC



- First single, Fully Integrated Federal Health Care Center Between the VA and DoD
- Designed to improve access, quality, and cost effectiveness of health care delivery to beneficiaries of both DoD and VA

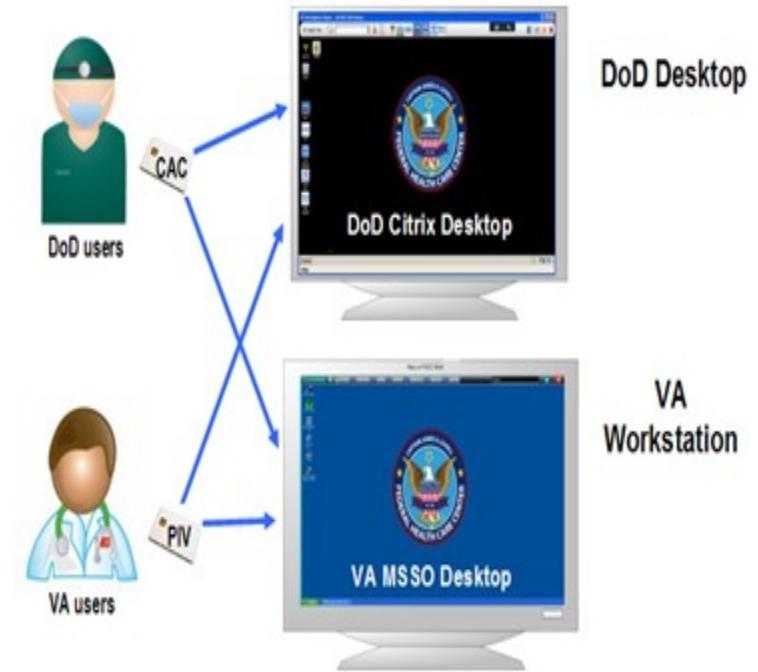
JAL FHCC Capabilities Delivered



- **Single Patient Registration**

- Sign on once with a DoD CAC or VA PIV

- **Medical Single Sign-On**
- Find a patient one time in any application and other applications follow automatically



JAL FHCC Future Capabilities



- **Orders Portability (OP) for Laboratory and Radiology**
 - View, manage and display in a computable format
 - Display images within either VHA or DoD imaging systems
- **OP Pharmacy**
 - Reconcile medication and allergies for all patients; reachable 24/7 for discharge medications
- **OP Consults**
 - Will allow consults and referral orders for processing for all patients using either DoD or VA health information system



JAL FHCC- Screen Shots

Patient information is automatically found & displayed in other applications (context) including VistA & CPRS

The screenshot illustrates the integration of patient data across different applications. A yellow arrow points from the top center of the slide down to the MHS FHCC Desktop window, indicating the source of the data. The MHS FHCC Desktop window shows a 'Folder List' on the left with 'Notifications [62]' selected. The main area displays 'Appointments' with a list of scheduled appointments for 'ZZTEST, GLOBAL'. The VistA window on the right shows 'VISTA North Chicago (vista.northchicago.med.va.gov)' with a 'User Utility Menu ...' open, listing options like 'Detailed Request Display' and 'Display Patient Demographics'. The CPRS window at the top right shows medical history including 'Hysterectomy', 'Chronic Obstructive Pulmonary Disease', 'Asthma', and 'Congestive Heart Failure'. It also displays 'Active Medications' (none found) and 'Clinical Reminders' (e.g., 'HOW TO RESOLVE A REMINDER DUE NOW').

* The health record above contains sample test data used for demonstrating this conference

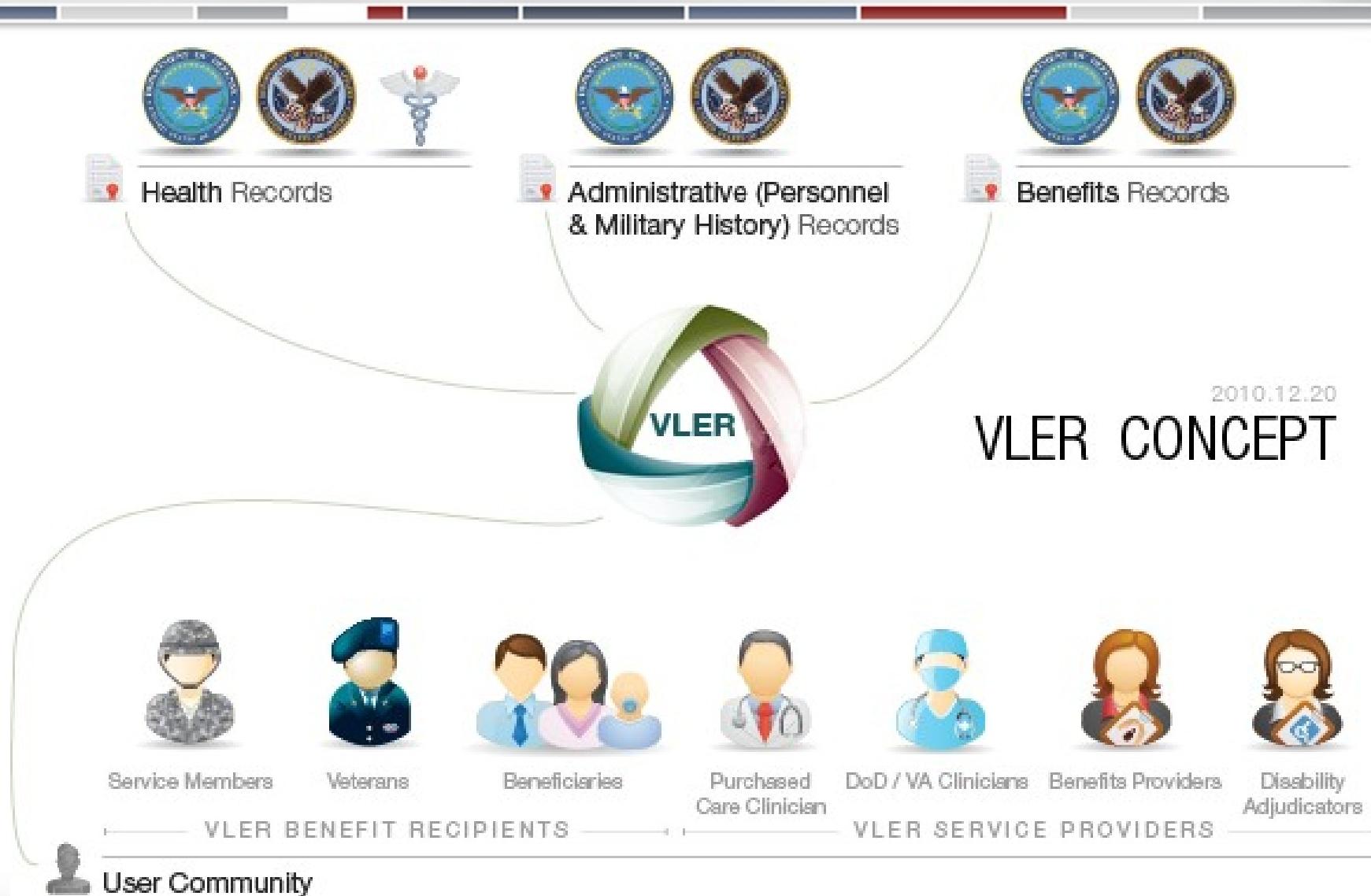


JAL FHCC Challenges

- Complexity
 - Systems & Networks
 - Identity
 - Configuration Control
- Change Management



VLER Concept





VLER Capability Areas & Points of View



VCA 4

VCA 4: Single Virtual Access Point for Health & Benefits: Self Help for Service Members & Veterans

Veteran Master Identity



VCA 2: Health Data Exchange for Veterans Benefits Administration & Social Security Administration Disability Benefits: Adjudicators Helping Service Members and Veterans

VCA 1



VCA 2



VCA 3



Benefit and Service Providers



VCA 3:

Data Exchange for Housing, Insurance, Education & Memorial Benefits: Benefit Providers Helping Service Members and Veterans

VLER Phase 1A Pilot Accomplishments



Tidewater Pilot

- Successful demonstration of capability to exchange data through NwHIN
- Beta testing, HHS CONNECT software
- On-boarding process for admitting new members to NwHIN

San Diego Pilot

- Demonstrated health information can be exchanged using NwHIN

VLER Tidewater C32 Data Exchange



MedVirginia Solution - Lifescape Department of Veterans Affairs Department of Defense Summary Continuity of Care Document (C32)

MedVirginia
Continuity of Care Document

NOTE: This C32 may not constitute a complete record.

Summarization of Episode Note
Created On: October 6, 2010

Patient:	CHDRONE CHDRZZZ TEST PATIENT 1234 Howard St. LA JOLLA, CA 92038	Patient ID:	1991723718EV293031
Birthdate:	[REDACTED]	Gender:	M
Language(s):	ENGLISH	Marital Status: Married	
Source:	Department of Veterans Affairs		

Table of Contents

- Allergies
- Problem Conditions
- Medications - Prescription and Non-Prescription
- Vital Signs
- Lab Results - Chemistry and Hematology
- Immunizations

Allergies

Allergen	Reaction	Severity	Verification Date	Source	Event Type	Comments
CHOCOLATE	RASH	-	28 Aug 2010	EAST BRASSEY VA NURSING STATION NEW JERSEY HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PENICILLIN	DRY MOUTH, URTICARIA	-	14 Jun 2010	HAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ONYCOCODINE	ANXIETY	-	14 Jun 2010	HAMPTON (VAMC)	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
SMELL FISH	RASH, DIARRHEA	-	21 Sep 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
ASPIRIN	RASH, ITCHING OF EYE	-	21 Sep 2009	SAN DIEGO HCS	Adverse reaction to drug	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
WATERPOW	ITCHING OF EYES, DIARRHEA, SWELLING	-	14 Dec 2009	SAN DIEGO HCS	Adverse reaction to food	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.
PEANUTS	RASH, SWELLING	-	18 Dec 2009	SAN DIEGO HCS	Adverse reaction to substance	This VA Document contains all allergies for the patient, from all VA treatment facilities, but it does not contain allergies that were deleted or entered in error.

* The health record above contains sample data used for demonstration purposes



Joint EHR Modernization Objectives

- “EHR modernization efforts provide the opportunity to implement standards-based Health IT solutions that will modernize existing Department EHR capabilities...and (provide) reduced sustainment costs.” *

To achieve these objectives, the Departments will widely integrate business requirements, acquisition and technical approaches.

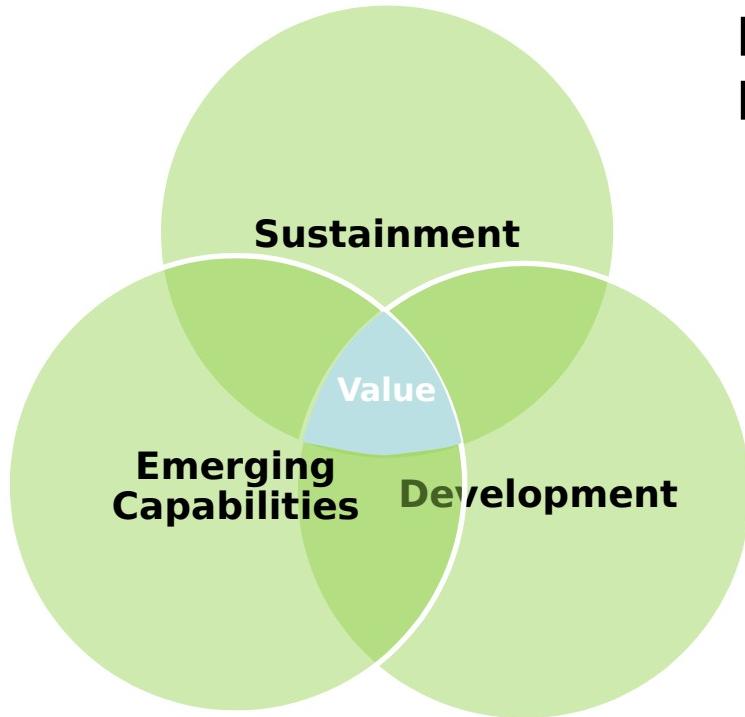
*Joint Executive Council and Health Executive Council Report to Congress (RTC) on Defense and Department of Veterans Affairs Medical Information Technology.



Joint EHR Modernization Objectives

- Both Departments are working toward common objectives:
 - Effectiveness:
 - Provide a patient-centric health care experience
 - Improve the quality of delivered services
 - Ensure interoperability and data sharing between the departments
 - Efficiency:
 - Reduce overall cost of Health IT investments in acquisition, development and sustainment

EHR Transformation Focus



- Clinical Informatics
- System Engineering
- Interagency Synchronization

Military Health System EHR Efforts

Sustainment

- Availability, Usability, Speed
- Establish a reasonable baseline (Theater & Garrison)
- Right people in the right seats
- Patient safety/compliance

Development

- Engineering & Innovation
- Integration/Interoperability
- Repurposing

Emerging Capabilities

- Functional & Technical testing labs
- Balance of Theater/Garrison priorities
- DoD/VA synchronization

Mission Focused EHR Way Ahead

Approaches*



Figure 1: VA EHR Modernization Strategy
VA Approach

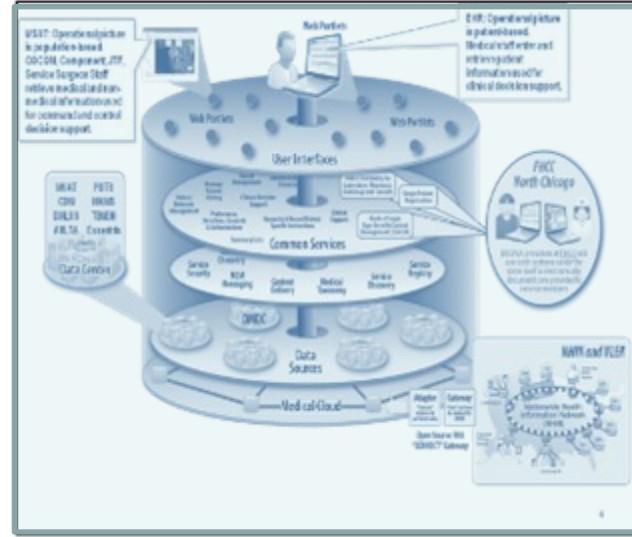


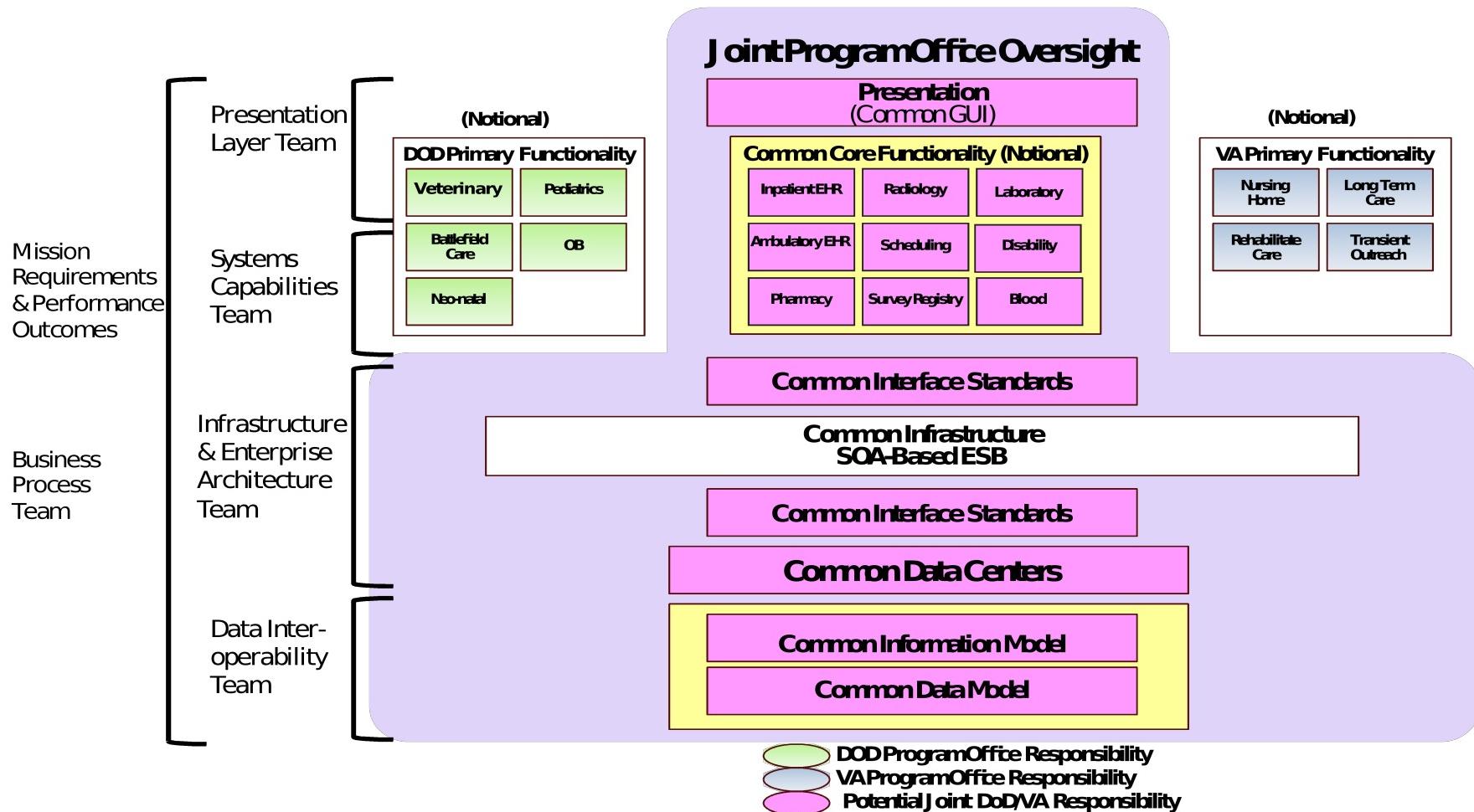
Figure 2: MHS Technical Modernization Strategy
DoD Approach

- Employ an iterative, collaborative approach to evolving business processes
- Leverage commercial innovation (open source)
- Provide architecture and data management guidelines (SOA)
- Build from VistA legacy using new application interface

- Develop detailed “to be” workflow processes
- Use commercial off the shelf (COTS) software without modifications where possible
- Innovate at applications layer while using core common enterprise services (SOA)
- Use modular COTS upgrades to transition from legacy

* From Joint DoD and VA Health IT Modernization Way Forward briefing (7
2011 MHS Conference
October 2010)

Common Design Pattern & Framework





EHR - Where We Are Now

DoD/VA interagency teams (working the “what”):

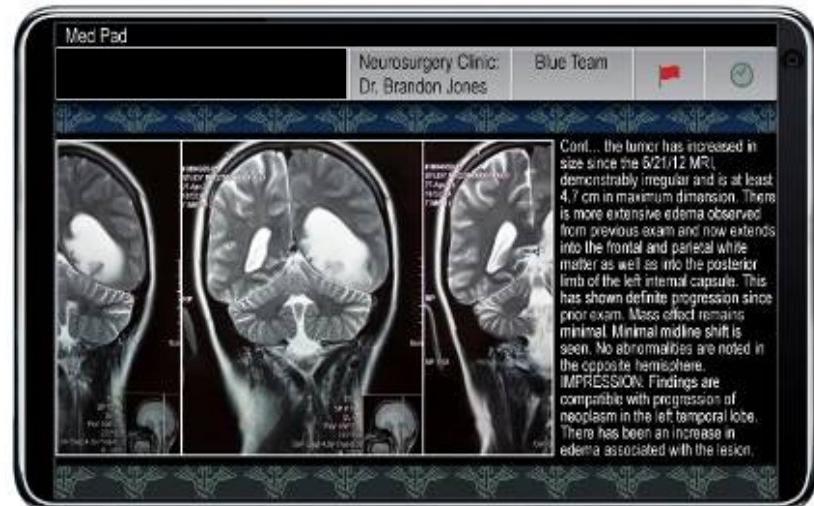
- Mission requirements and performance outcomes
- Business processes
- Presentation layer
- Systems capabilities
- Infrastructure and enterprise architecture
- Data interoperability

Target outputs for path forward (addressing the “how”):

- Agreement on a common vision and definition of an interagency EHR
- Produce a Clinical Interoperability Framework & Common Clinical Data Model
- Develop a Common Business Reference Model/Capability Taxonomy
- Establish a prioritized Common Clinical EHR Capability
- Develop a Common User Interface using user/patient centric agile



Intuitive Interface



Common core services supporting a context appropriate user interface

* The health record above contains sample data used for demonstration purposes



The Blue Button- VA

VA Home | My Healthevet | VA Facility Locator | About MHV | Help | FAQs | Contact MHV | Search: GO

HOME PERSONAL INFORMATION PHARMACY RESEARCH HEALTH GET CARE TRACK HEALTH MHV COMMUNITY
IN CASE OF EMERGENCY PROFILES ACCOUNT HEALTH INFORMATION CARD

May 2010 Women's Health Month

Personal Information

My HealtheVet (MHV) has made it easy to keep track of your Personal Information. MHV is all about you and your health. Part of your personal online health journal is your identification. When you registered for My HealtheVet, you entered important information about yourself. This is where you'll find it, along with other important facts like your login information, blood type and emergency contacts.

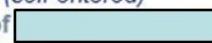
In Case of Emergency 
Keep your emergency contacts in one place... [More »](#)

My Profile 
Your name, address and identifying information... [More »](#)

Download your Data 
Download, print, or share VA health data. It is simple, safe and reliable. [More »](#)

My Account 
Manage your account, in-person authentication... [More »](#)

Change your Password 
Change your My HealtheVet password here... [More »](#)

View My Links Information (self-entered)
(Personal Health Journal of 

Member Logout 

Quick Links

- [VA National Suicide Prevention Hotline](#)
- [If you are in crisis call: 1-800-273-TALK \(8255\)](#)
- [In-Person Authentication](#)
- [Flu Information](#)
- [My HealtheVet Learning Center](#)
- [VA Mental Health Services](#)
- [View the MHV](#)



The Blue Button- TRICARE

Home Resource Center My Profile Family Profile Logout

TRICARE

Welcome to TRICARE Online!

TRICARE Online features secure access to beneficiary appointments, prescriptions, and personal health data.

Welcome, [REDACTED]

Secure Messaging Pilot Program
Need Help? MHS Help Desk 1-800-600-9332 (CONUS) or 1-866-637-8725 (OCONUS)

Looking for information about your benefits?
Visit the [TRICARE Beneficiary Site](#)



Beneficiary Home

Your Family's Sponsor is [REDACTED] [Help](#)

Name Date of Birth Gender Primary MTF

[REDACTED]

Family Member list last updated: 11/19/10 3:59 PM [Refresh list of family members](#)

Appointment Center [Help](#)

Notice: This site should not be used for emergency medical conditions. In the case of a medical emergency, call 911 or contact your local Emergency Medical Service.

Select Family Member: Myself [Go](#)

Book an Appointment for Myself

Select the visit reason from the list, click on the 'View Appointments' button, and follow the steps.

MTF Site Message: MTF Specific Appointing Text

Select Visit Reason: Allergy Test [View Appointments](#)

View or Cancel Appointments for Myself

There are no future appointments currently booked.

Announcements [view all](#)

- + Coming soon: TRICARE Online family member booking!
- + Ensure you have access to upcoming TRICARE Online features!

Personal Health Data [view](#)

Accessing your **Personal Health Data**, containing your labs, allergy profile, medication profile, problem list, and encounters.

Refill [view](#)

 **Refill** and check status of your prescriptions. Access Mail Order Pharmacy

CHART [view](#)

 Access **CHART**, the Consolidated Health Assessment Reporting Tool, which combines health assessment and deployment-related questionnaires in one place.

eForms [view](#)

 Access **eForms** to complete your health-related paperwork electronically, prior to your appointment.



REPORT TO THE PRESIDENT
REALIZING THE FULL POTENTIAL OF
HEALTH INFORMATION TECHNOLOGY
TO IMPROVE HEALTHCARE
FOR AMERICANS:
THE PATH FORWARD

Executive Office of the President
President's Council of Advisors
on Science and Technology

December 2010



Wrap-Up



- Expectations for future VLER pilots and the future of the Virtual Lifetime Electronic Record
- Alternatives for the EHR Way Ahead
- Role of patients in future clinical work flow
- National focus on health care